WHAT IS CLAIMED IS:

1. A roller bottle for cell growth culturing, comprising a bottom wall, a substantially cylindrical side wall and a top wall, said top wall having an opening for providing access to an interior portion of said roller bottle, said side wall being formed with at least one helical pleat extending substantially from said bottom wall substantially to said top wall, said helical pleat providing a large surface area for said cell growth culturing and providing a helical channel for distributing liquid to interior surface regions of said bottle in response to rotation of said bottle about a longitudinal axis of said cylindrical side wall.

2. The roller bottle of Claim 1, wherein the roller bottle is formed unitarily from a plastic material.

3. The roller bottle of Claim 2, wherein the plastic material is blow molded.

4. The roller bottle of Claim 3, wherein the plastic material is less than 0.060 inch thick.

5. The roller bottle of Claim 1, wherein the helical pleat is interrupted by at least one planar section extending substantially from said bottom wall to said top wall.

6. The roller bottle of Claim 1, wherein the helical pleat defines a pitch of between approximately 2° and 10°.

7. The roller bottle of Claim 1, wherein said pleat defines a substantially V-shaped cross-section.

8. The roller bottle of Claim 7, wherein apices of adjacent passes of said helical pleat are spaced from one another by a distance of approximately 0.82 cm.